

## INTERNATIONAL SEARCH REPORT

Application No

PCT/GB2005/000094

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 E02F3/40 E02F5/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.                          |
|------------|---|--|
| X<br>A     | SU 534 552 A1 (RURAL CONS RES EXP)<br>5 November 1976 (1976-11-05)<br>figure 1  | 1-8, 11,<br>14, 16<br>9, 10, 12,<br>13, 15, 17 |
| X<br>A     | PATENT ABSTRACTS OF JAPAN<br>vol. 009, no. 146 (M-389),<br>21 June 1985 (1985-06-21)<br>-& JP 60 023526 A (TOUKIYOU TONE KAIHATSU<br>KK), 6 February 1985 (1985-02-06)<br>abstract; figures 1-6 | 1-8, 10,<br>11<br><br>12-17                    |
| X<br>A     | US 4 691 455 A (NEWMAN ET AL)<br>8 September 1987 (1987-09-08)<br>figures   | 1-8, 10<br>11-17                               |
|            | -/-   |  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&amp;\* document member of the same patent family

Date of the actual completion of the international search

3 May 2005

Date of mailing of the international search report

18/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Laurer, M

## INTERNATIONAL SEARCH REPORT

Application No  
PCT/GB2005/000094

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                    | Relevant to claim No.   |
|------------|---|-------------------------|
| X<br>A     | WO 90/05813 A (BOWVILLE PTY., LTD)<br>31 May 1990 (1990-05-31)<br>figures<br>-----                                    | 1,2,14<br>3-8,<br>15-17 |
| X<br>A     | SU 435 324 A1 (RURAL CONS DES INST)<br>5 July 1974 (1974-07-05)<br>figure 1<br>-----                                  | 1,14-17<br>9,11,12      |
| X          | GB 2 341 843 A (JOHN EDWARD * MANSFIELD;<br>MARTIN * LIVERMORE)<br>29 March 2000 (2000-03-29)<br>figures<br>-----     | 1,14-17                 |
| X          | DE 21 23 934 A1 (GPPER, KARL)<br>23 November 1972 (1972-11-23)<br>figures 1,2<br>-----                                | 1-3                     |
| X          | DE 196 40 177 A1 (MUELLER, KARLHEINZ,<br>74206 BAD WIMPFEN, DE)<br>10 April 1997 (1997-04-10)<br>figures 3,4<br>----- | 1,2                     |
| A          | EP 0 459 100 A (MIEGER, ROLF)<br>4 December 1991 (1991-12-04)<br>figures 5,6<br>-----                                 |                         |

## INTERNATIONAL SEARCH REPORT

 Application No  
 PCT/GB2005/000094

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) |             | Publication<br>date |
|---|----|---------------------|----------------------------|-------------|---------------------|
| SU 534552                                 | A1 | 05-11-1976          | NONE                       |             |                     |
| JP 60023526                               | A  | 06-02-1985          | NONE                       |             |                     |
| US 4691455                                | A  | 08-09-1987          | NONE                       |             |                     |
| WO 9005813                                | A  | 31-05-1990          | WO                         | 9005813 A1  | 31-05-1990          |
| SU 435324                                 | A1 | 05-07-1974          | NONE                       |             |                     |
| GB 2341843                                | A  | 29-03-2000          | NONE                       |             |                     |
| DE 2123934                                | A1 | 23-11-1972          | BE                         | 783348 A1   | 01-09-1972          |
|   |    |                     | FR                         | 2144233 A7  | 09-02-1973          |
|   |    |                     | LU                         | 65354 A1    | 23-08-1972          |
| DE 19640177                               | A1 | 10-04-1997          | DE                         | 29515622 U1 | 23-11-1995          |
|   |    |                     | DE                         | 29516969 U1 | 14-12-1995          |
| EP 0459100                                | A  | 04-12-1991          | DE                         | 4022689 A1  | 05-12-1991          |
|   |    |                     | AT                         | 117393 T    | 15-02-1995          |
|   |    |                     | DE                         | 59104288 D1 | 02-03-1995          |
|   |    |                     | EP                         | 0459100 A1  | 04-12-1991          |